Office Memorandum • UNITED STATES GOVERNMENT

SPM 9-0846

TO : Chief, Engineering Staff, OC

DATE: 5 MAR 1959

FROM : Chief, Special Programs Staff, OC

SUBJECT: Future Planning R.D. 605 T.O. 3

1. Upon receipt of the December 1958 Progress Report stating the completion of phase I, we desire to establish our views relative to initiating phase II. Since specific details cannot be established until the final report is received and reviewed, this memorandum is intended only as a guide in studying the report to achieve phase II.

2. It is our hope to accelerate this program toward production by identifying phase II as prototype development rather than engineering model development. With detailed layout guidance and the experience gained by the contractor during the study phase, we feel that sub-assembly configuration will produce the prototype.

3. Our planning, therefore, will progress from the study report to layout designs. The end result for production purposes will be systems containing an antenna, filter, crystal holder, and universal mounting brackets for a video amplifier and recorder. Due to the size and shape of the low band antenna, all units for this assembly will be board mounted except the antenna.

4. We recommend, therefore, that planning be started for two complete prototype systems as follows:

✓ A. Fabric mounted logarithmic periodic antenna 50-500 mcs with an equipment board containing a filter, crystal holder, and space for ancillary equipment.

✓ B. Board mounted logarithmic periodic antenna 500-1000 mcs also containing a filter, crystal holder, and space for ancillary equipment.

✓ C. Board mounted logarithmic periodic antenna 1000-10,000 mcs also containing a filter, crystal holder, and space for ancillary equipment.

✓ D. Horn antenna 10-40 kmc with a built-in crystal holder mounted on an equipment board with space for ancillary equipment. The bandpass filters for this system are expected to be dielectric wafers.

.... E. The following .....

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E. The following pass band filters are required for use with applicable antennas:

LC
I. 50-100 mcs
II. 100 - 200 mcs
III. 200 - 500 mcs
strip line
IV. 500 - 750 mcs
V. 750 - 1000 mcs
VI. 1000 - 2000 mcs
VII. 2000 - 4000 mcs
VIII. 4000 - 8000 mcs
IX. 6000 - 10,000 mcs
delete from consideration
X. 10,000 - 20,000 mcs
XI. 15,000 - 30,000 mcs
XII. 20,000 - 40,000 mcs

5. We are anxious to accelerate this program because stocks of currently used antennas are low and delivery of replacements, on order for fourteen months, remains indefinite. For further discussions please contact [redacted] OC-SP/EA, [redacted] 25X1

[redacted] 25X1

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